

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 07-123876

(43)Date of publication of application : 16.05.1995

(51)Int.Cl.

A01G 13/02
C08L 67/04
D21H 19/16
// D01F 6/62

(21)Application number : 05-273831

(71)Applicant : DAICEL CHEM IND LTD

(22)Date of filing : 01.11.1993

(72)Inventor : KURODA TAKAYUKI

(54) SHEET-SHAPED COMPOSITION CONTAINING BIODEGRADABLE RESIN AND SHEET-SHAPED MOLDED ARTICLE

(57)Abstract:

PURPOSE: To obtain a sheet-shaped composition containing paper or fibrous material and a biodegradable water-insoluble resin as constituting components, keeping the biodegradability and at the same time having the sufficient strength as a mulching sheet.

CONSTITUTION: This sheet-shaped composition is obtained by e.g. immersing a sheet-shaped material obtained from paper and/or a fibrous material (e.g. pulp) to a solution or an emulsion composed of a biodegradable water-insoluble resin (a polyhydroxyalkanoate, a lactone resin, a biodegradable polyester, a polyamino acid, etc.) and an organic solvent. The biodegradable resin may be mixed by e.g. subjecting the mixture of a raw material of paper with the biodegradable resin to the paper making process. When applied as an agricultural sheet, the sheet-shaped composition is not broken within 3 months but it is being decomposed after 5 months because it keeps the biodegradability so that it is free from the trouble in plowing-in.

LEGAL STATUS

[Date of request for examination] 16.11.1999

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or

(19)



JAPANESE PATENT OFFICE

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(54) **SHEET-SHAPED COMPOSITION CONTAINING
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(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開平7-123876

(43) 公開日 平成7年(1995)5月16日

(51) Int.Cl. ⁶	識別記号	序内整理番号	F I	技術表示箇所
A 01 G 13/02		D 7235-2B		
C 08 L 67/04		L N Z		
D 21 H 19/16				
// D 01 F 6/62	3 0 5	A 7199-3B 7199-3B	D 21 H 1/34	C 審査請求 未請求 請求項の数10 O L (全4頁)

(21) 出願番号 特願平5-273831

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(22) 出願日 平成5年(1993)11月1日

(72) 発明者 黒田 隆之
広島県大竹市玖波4-4-1

(54) 【発明の名称】 生分解性樹脂を含むシート状組成物及びシート状成形物

(57) 【要約】

【目的】 紙またはパルプ等の繊維状物質と生分解性樹脂からなる分解性のシート状組成物及び成形物、農業用シート及びシート状成形物を開発すること。

【構成】 「生分解性樹脂を構成成分に持つシート状組成物」、「粉末状および/または繊維状の生分解性樹脂と粉末状および/または繊維状物の混合物からなるシート状成形物」および「生分解性樹脂を含浸させた含浸紙からなる農業用シート」。

【効果】 紙またはパルプ等の繊維状物質と生分解性樹脂からなる分解性のシート状組成物及び成形物、農業用シート及びシート状成形物を開発することができた。

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【0038】 [比較例3] 従来のポリエチレン製マルチシートで、実施例1と同様の評価を行った。

*

結果

	耐久性 (シート破れの有無)		鍛込みの可否
	敷設後1ヶ月	敷設後3ヶ月	
実施例1	無し	無し	可能
実施例2	無し	無し	可能
比較例1	有り	有り	可能
比較例2	有り	有り	可能
比較例3	無し	無し	不可

※敷設後3ヶ月間は、破れの発生が認められず、マルチシートとして十分の強度を有していた。

【0040】

【発明の効果】実施例ではいずれも5ヶ月後は完全に分解が進んでおり、鍛込みに何の支障もなかった。また、※

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **10100353 A**

(43) Date of publication of application: **21.04.98**

(51) Int. Cl

B32B 27/36

B32B 23/08

(21) Application number: **08259395**

(71) Applicant: **MITSUBISHI PLASTICS IND LTD**

(22) Date of filing: **30.09.96**

(72) Inventor: **TERADA SHIGENORI
TAKAGI JUN**

(54) BIODEGRADABLE LAMINATED FILM

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a biodegradable laminated film having biodegradability and excellent in sealability and transparency by providing a non-stretched film containing a polylactic acid type polymer and other biodegradable aliphatic polyester to one surface of a stretched film based on a polylactic acid type polymer.

SOLUTION: A non-stretched film to be used contains a polylactic acid type polymer and biodegradable aliphatic polyester different therefrom. It is pref. that the m.p. Tm of a stretched film composed of polylactic acid type polymer or a compsn. based thereof is 100°C or more. Aliphatic polyester different from polylactic acid is one having an alkylene-ester bond as a fundamental skeleton and a urethane bond, an amide bond or an ether bond can be

introduced within a range not substantially exerting effect on biodegradability. Especially, an isocyanate compd. is used and a urethane bond can be introduced into the main chain thereof to jump up the mol.wt. thereof.

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